



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/590,243

08/22/2006

Kiyohito Hiromitsu

8007-1115

6750

466 7590 05/13/2009

YOUNG & THOMPSON
209 Madison Street
Suite 500
ALEXANDRIA, VA 22314

EXAMINER

BLADES, JOHN A

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

05/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,243	Applicant(s) HIROMITSU ET AL.	
	Examiner JOHN BLADES	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 13 and 16-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/22/06, 11/08/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 13 & 16-19 are pending as amended on 04/08/2009.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. **Claims 13 & 16-19** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the current claims 24-28 of copending Application No. 10/537,358. Although the conflicting claims are not identical, they are not patentably distinct from each other because the

Art Unit: 1791

methods of each claims of App. 10/537,358 describe simple cleaning using the same composition and structure of the invention which is claimed in the instant application. Using the invention of these pending claims for their intended use – that is, clamping in a mold die and applying heat/pressure – would be practicing the conflicting claims of ‘538.

3. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 13 & 16-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Tsuchida et al.*, JP 2001-079857 in view of *Hoshino et al.*, US Patent 6,376,046.

Art Unit: 1791

3. Tsuchida et al. teaches a mold conditioning sheet with porous base sheets made from fibrous material, enclosing a thermosetting resin and release agent and unvulcanized rubber molding member which is heat melted (see throughout machine translation, e.g. [0014-0024, 0034], FIGS. 1-2). This reference does not expressly disclose outermost base sheets with a porosity of *70% or more* (although it should also be noted that no limit to the degree of porosity is disclosed either).
4. With regard to **claim 13**, Hoshino does teach a cleaning sheet with these highly porous outer layers which release greater than 70% of a detergent [Col. 15-16, Tables 1-2]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the highly porous outer layers of Hoshino with the basic mold cleaning sheet of Tsuchida et al., if one wanted to ensure high resin release for complete filling/cleaning of a mold cavity. Common sense dictates that more/larger pores would allow more material through the sheets.
5. With regard to **claim 16**, it is unclear whether Tsuchida et al. teaches *mineral powder* filler, however, Hoshino does expressly disclose the use of solid inorganic mineral particles for more abrasive cleaning power [Col. 8]. It would have been obvious to one of ordinary skill in the art to combine the mineral powder of Hoshino with the mold conditioning sheet of Tsuchida et al., if one desired a

Art Unit: 1791

cost-saving inorganic filler to help thoroughly clean all recesses of the mold cavity [Col. 7-8].

6. With regard to **claims 17-19**, Tsuchida et al. and Hoshino do both teach sheets which are adhered, and this constitutes sealing by some sort of pressing/deformation. More specifically, Hoshino teaches a variety of cleaning sheet closure means, including thermal bonding with a sandwiched thermoplastic resin film, use of adhesives, and physical deformation of the sheets [Col. 6, 47-55, Col. 12]. These are all recognized as well-known solutions for sealing such a product. The products formed in the prior art are deemed to be equivalent to that which might be formed by the instant claims; it would have been obvious to one of ordinary skill in the art to combine with the mold conditioning sheet of Tsuchida et al.

Conclusion

The examiner also notes US Patents 4,956,132 (for cleaning sheet featuring the use of a curing agent) and 5,674,020 (for specific porosity values of a releasing sheet), and US Pub. 2004/0149312 as prior art which is relevant to the current claims.

Art Unit: 1791

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN BLADES whose telephone number is (571)270-7661. The examiner can normally be reached on M-Th (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on (571)272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.B./

Patent Examiner

/Joseph S. Del Sole/
Supervisory Patent Examiner, Art Unit 1791